

REMARKS

Reconsideration and withdrawal of rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance or into better condition for appeal. The Examiner is thanked for the courtesies extended to the undersigned during the interview at the PTO on October 23, 2003.

I. STATUS OF CLAIMS AND FORMAL MATTERS

Claims 18-35 are pending. Claims 18, 20, 29, 31 and 32 are amended, without prejudice.

No new matter is added.

The amendments and the remarks made herein are not made for reasons related to patentability and, thus, do not prevent the application of the doctrine of equivalents. Support for the amended recitations in the claims and for the new claims are found throughout the specification and from the pending claims.

II. 35 U.S.C. §112, SECOND PARAGRAPH, REJECTIONS

Claims 20, 29 and 31 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. The rejections are traversed.

The amendments to the claims render the rejections moot.

Consequently, reconsideration and withdrawal of the Section 112, second paragraph, rejection are respectfully requested.

III. 35 U.S.C. §103 REJECTIONS

Claims 18, 19, 24, 29-31, 33 and 35 were rejected under 35 U.S.C. § 102(a) and (b) as allegedly being anticipated by Hansen et al., US 5,693,411 ("Hansen"); claims 18-33 and 35 were under 35 U.S.C. § 102(a) and (b) as allegedly being anticipated by Hokko Chem, JP 10-273405 ("Hokko"); and claims 18-35 were rejected under 35 U.S.C. § 103(a) as allegedly being

unpatentable over the combined teachings of Hokko, Varkonda et al., (“Varkonda”), and Hoshi (US 6,211,118). As these rejections are similar, they will be addressed collectively. Applicants urge that these documents, taken alone or in any fair combination, do not teach, enable or suggest the present invention.

The present claims are directed to a method for controlling harmful organism by applying a formulation, the formulation comprising a combination of at least one agrochemically active compound and a polymer that comprises at least one functional group which interacts electrostatically with the agrochemically active compound through the formation of hydrogen bonds to the harmful organism or to an environment where the harmful organism resides. The invention method provides for the **controlled release** of the agrochemically active compound to the harmful organism or environment where it resides. As discussed during the interview with the Examiner, the cited documents are not analogous, teach away from the instant invention and, in fact, teach away from each other.

First, Hansen is not analogous art. Hansen relates to “improved *fibers*” that are incorporated into absorbent articles such as disposable diapers, feminine hygiene products and bandages. Hansen fails, however, to teach and enable a method of controlling harmful organisms by applying at least one *agrochemically active* compound and a polymer to the organism or to an environment within which the organism resides, wherein the agrochemically active compound is released in a *controlled manner*. Applying an agrochemical to a diaper does not fall within the scope of Applicants’ invention. And even if it did, there is no indication in Hansen that the agrochemical would undergo controlled release.

Turning to Hokko, the document relates to formulations that are applied to a flooded rice field. Hokko, however, does not teach and enable each and every element of the claimed

invention. For example, there is no indication of controlled release. Further, a skilled artisan reading Hokko would question whether an agrochemical formulation would be agrochemically effective in a flooded rice field, since the highly aqueous nature of the field would undoubtedly dilute the formulation.

Additionally, Applicants respectfully disagree with the allegation in the Final Office Action that Hokko inherently teaches controlled release of an active compound. There is simply no indication in Hokko of controlled release and, as such, it is equally possible that Hokko relates to **surge** release. In other words, as controlled release is not necessarily present in Hokko, inherency cannot attach. According to *In re Rijckaert*, 9 F.3d 1531, 1957 (Fed. Cir. 1993), “a retrospective view of inherency is not a substitute for some teaching or suggestion supporting an obviousness rejection.” The Federal Circuit is clear that “ ‘inherency...may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient [to establish inherency].’ ” *Continental Can Company v. Monsanto Company*, 948 F.2d 1264, 1269 (Fed. Cir. 1991), *citing to In re Oelrich*, 666 F.2d 578, 581-582 (C.C.P.A. 1981). Indeed, “before a reference can be found to disclose a feature by virtue of its inherency, one of ordinary skill in the art viewing the reference must understand that the unmentioned feature at issue is *necessarily* present in the reference.” *SGS-Thomson Microelectronics, Inc. v. International Rectifier Corporation*, 31 F.3d 1177 (Fed. Cir. 1994) (emphasis in original).

The Examiner’s concerns with Hokko and the controlled release feature of Applicants’ invention are analogous to situations in pharmaceutical patent practice. More specifically, pharmaceutical inventions that provide for a controlled release of a formulation are patentably distinct over art that purportedly disclose the formulation, but fail to disclose the controlled

release feature. Inherency does not attach in such situations, for example, because the art fails to teach and suggest a mechanism which provides for the controlled release. In the instant case, such a mechanism exists, as explained on page 4 of the instant specification, whereby the “polymers used according to the invention have those functional groups in the molecule which are capable of forming intermolecular hydrogen bonds with functional groups present in the molecules of the agrochemically active compound and interact with the active compound in such a manner that controlled release of the active compound to the plant to be treated and/or the soil is possible.” Such a teaching, however, is absent in Hokko. And as Hokko does not necessarily provide for controlled release, inherency cannot attach.

Consequently, reconsideration and withdrawal of the Section 102 rejections based on Hansen and Hokko are respectfully requested.

The Section 103 rejections are equally defective. A skilled artisan would not be motivated to combine Hokko, Varkonda and Hoshi. As explained above, Hokko does not teach or suggest controlled release and may very well render any formulation administered to a flooded rice paddy agrochemically ineffective because of dilution.

Further, Hokko teaches away from both Hoshi and Varkonda, thereby obviating any motivation to combine. More specifically, Hokko relates to flooded rice paddies. Hoshi, however, relates to the control of weeds in substantially dry environments, such as in the soil of cultivated and uncultivated fields. (*See* col. 1, lines 57-62). Further, the Examiner noted during the interview that the environment to which agrochemicals are applied in Varkonda are not aqueous as in Hokko. (*See* Interview Summary Record).

Additionally, there is no indication in Hoshi that its herbicidal compositions can be agrochemically effective in the highly aqueous environment taught in Hokko. Column 5, lines

15-36, in Hoshi list the locations where its herbicidal compositions can be applied. Aqueous environments, such as Hokko's flooded rice fields, are not taught.

Thus, the disparate teachings of these three documents would not motivate a skilled artisan to combine their teachings in order to practice the instantly claimed invention. Instead, a skilled artisan would be motivated *away* from combining these three documents and, as such, the obviousness rejection cannot stand.


Consequently, reconsideration and withdrawal of the Section 103 rejections are respectfully requested.

CONCLUSION

By this Amendment, the application is in condition for allowance or in better condition for appeal. Favorable reconsideration of the application, withdrawal of the rejections and prompt issuance of a Notice of Allowance are, therefore, all earnestly solicited.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By:


Samuel H. Megerditchian
Reg. No. 45,678
Tel: (212) 588-0800
Fax: (212) 588-0500